AMENDMENT TO THE CLAIMS

Listing of Claims:

Claim 1 (Currently Amended): A variable reluctance resolver comprising multiple stator magnetic poles having resolver exciter coils and resolver output coils, which respectively output the X component and Y component of a rotary angle in accordance with the rotation of a rotor, ~~wherein~~wherein:

the resolver output coils are wound such that the output voltage polarities ~~of~~ of the resolver output coils wound around at least 3 adjacent stator magnetic poles are the ~~same,~~ same;

the resolver output coils are divided into at least 2 or a greater even number of groups~~, and~~;

the resolver output coils within each group of the at least 2 or a greater even number of groups are connected in series such that the output voltage polarities of adjacent groups of the at least 2 or a greater even number of groups differ with respect to one another~~.~~; and

each group of the at least 2 or a greater even number of groups has outermost output coils and output coils between the outermost output coils wherein the number of turns of each of the outermost output coils is less than the number of turns of the output coils between the outermost output coils to reduce the effect of external magnetic flux.

Claim 2 (Canceled)

Claim 3 (Currently Amended): The variable reluctance resolver according to ~~claim 2~~claim 1 wherein the outermost coils have the same number of turns.

Claim 4 (Currently Amended): The variable reluctance resolver according to ~~claim 2~~claim 1 wherein the outermost coils of adjacent groups have the same number of turns.

Claim 5 (Canceled)

Claim 6 (Original): The variable reluctance resolver according to claim 1 wherein the variable reluctance resolver has an axis multiple angle of 7, an excitation pole pair count of 5, an output pole pair count of 2, and a stator magnetic pole count of 20, wherein all output coils are divided into 4 groups, one group of the 4 groups includes output coils wound around 5 adjacent stator magnetic poles such that the polarity of output voltages in the group is the same, and the output coils in each of the four groups are serially connected so that the output voltage polarities of adjacent groups are different.

Claim 7 (Original): The variable reluctance resolver according to claim 6 wherein each group has two outermost output coils and three output coils between the outermost output coils and wherein the number of turns of each of the outermost output coils is less than the number of turns of the three output coils between the outermost output coils to thereby reduce the effect of external magnetic flux.

Claim 8 (Original): The variable reluctance resolver according to claim 7 wherein the outermost coils of adjacent groups have the same number of turns.

Claim 9 (Original): The variable reluctance resolver according to claim 7 wherein the two outermost coils have the same number of turns.

Claim 10 (Original): The variable reluctance resolver according to claim 7 wherein the three output coils between the outermost output coil include a middle coil between two adjacent output coils and wherein the middle coil has more turns than the two adjacent coils.

Claim 11 (Currently Amended): A variable reluctance resolver comprising a rotor, a stator body having a plurality of stator magnetic poles, resolver exciter coils wound around the plurality of stator magnetic poles, and resolver output coils wound around the plurality of stator magnetic poles for outputting the X and Y components of a rotary angle of the rotor, wherein: ~~wound around the stator magnetic poles such that the plurality of~~

the resolver output coils are wound such that the output voltage polarities of the resolver output coils wound around at least 3 adjacent stator magnetic poles are the same;

the resolver output coils are divided into ~~an even number of~~ at least ~~two~~2 or a greater even number of groups~~, at least one group~~;

~~having~~ the resolver output coils ~~wound around at least three sequential stator magnetic poles, and each~~within each group of the ~~even number of~~ at least ~~two groups~~ 2 or a greater even number of groups are connected in series ~~to output the same polarity wherein~~such that the output voltage polarities of adjacent groups of the ~~even number of~~ at least ~~two~~ 2 or a greater even number of groups ~~have different voltage polarities~~differ with respect to one another~~.~~; and

each group of the at least 2 or a greater even number of groups has outermost output coils and output coils between the outermost output coils wherein the number of turns of each of the outermost output coils is less than the number of turns of the output coils between the outermost output coils to reduce the effect of external magnetic flux.

Claim 12 (Canceled)

Claim 13 (Canceled)

Claim 14 (Original): The variable reluctance resolver according to claim 11 further comprising an axis multiple angle of 7, an excitation pole pair count of 5, an output pole pair count of 2, and a stator magnetic pole count of 20, wherein all output coils are divided into 4 groups, one group of the 4 groups includes output coils wound around 5 adjacent stator magnetic poles such that the polarity of output voltages in the group is the same, and the output coils in each of the four groups are serially connected so that the output voltage polarities of adjacent groups are different.

Claim 15 (Original): The variable reluctance resolver according to claim 14 wherein each group has two outermost output coils and three output coils between the outermost output coils and wherein the number of turns of each of the outermost output coils is less than the number of turns of the three output coils between the outermost output coils to thereby reduce the effect of external magnetic flux.

Claim 16 (Original): The variable reluctance resolver according to claim 15 wherein the outermost coils of adjacent groups have the same number of turns.

Claim 17 (Original): The variable reluctance resolver according to claim 15 wherein the two outermost coils have the same number of turns.

Claim 18 (Original): A variable reluctance resolver comprising a rotor, a stator body having a plurality of stator magnetic poles, resolver exciter coils wound around the plurality of stator magnetic poles, and resolver output coils for outputting the X and Y components of a rotary angle of the rotor wound around the stator magnetic poles and having a multiple angle of 7, an excitation pole pair count of at least 5, an output pole pair count wherein the excitation pole pair count and the output pole pair count add or subtract to equal the multiple angle of 7, and a stator magnetic pole count of 20, wherein all output coils are divided into 4 groups, one group of the 4 groups includes output coils wound around 5 adjacent stator magnetic poles such that the polarity of output voltages in the group is the same, and the output coils in each of the four groups are serially connected so that the output voltage polarities of adjacent groups are different.